



YENYO

# SS52A THRU SS5BA

Surface Mount Schottky Barrier Rectifier

## Features

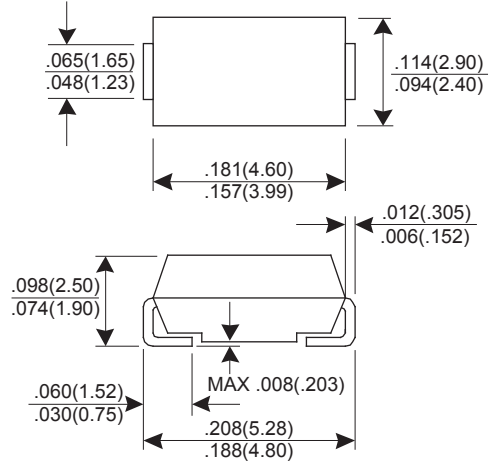
- \* Low profile package
- \* Ideal for automated placement
- \* Guardring for overvoltage protection
- \* Low power losses, high efficiency
- \* Low forward voltage drop
- \* High surge current capability

## Mechanical Data

- \* Case: Molded plastic SMA/DO-214AC
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solderable per MIL-STD-750 method 2026
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

**Voltage Range 20 to 100V  
Current 5.0 Ampere**

### SMA/DO-214AC



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	SS52A	SS53A	SS54A	SS55A	SS56A	SS58A	SS5BA	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current @ $T_L=100^\circ\text{C}$	$I_{F(AV)}$	5.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	120							A
Maximum Instantaneous Forward Voltage @ $I_F=5.0\text{A}$	$V_F$	0.55			0.75		0.85		V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	$I_R$	0.5 20							mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	90							$^\circ\text{C/W}$
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	25							$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

# RATINGS AND CHARACTERISTIC CURVES SS52A THRU SS5BA

FIG.1 - FORWARD CURRENT DERATING CURVE

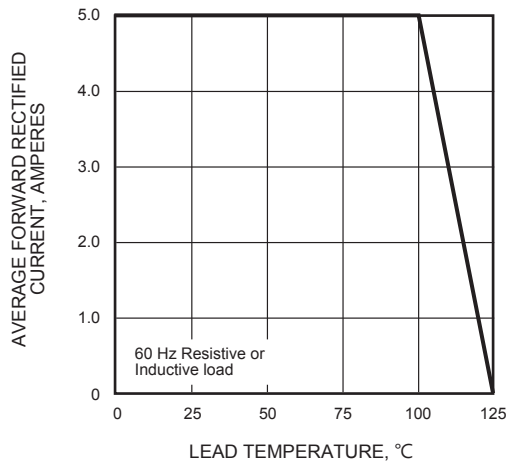


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

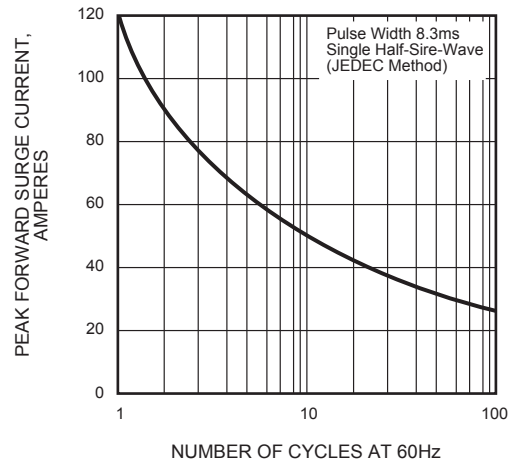


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

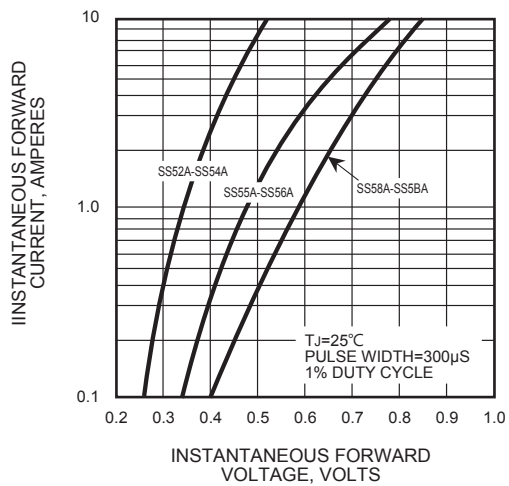


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

